



VIRGINIA WILDLIFE

MAY 2005

TWO DOLLARS



Director's Column

William L. Woodfin, Jr.



L to R: William L. Woodfin, Director, VDGI; Jo H. Fincham, PVA; Charlie L. Hayden, PVA; Phil D. Lowmes, VDGI and Sherry Smith Crumley, VDGI Board Chair.

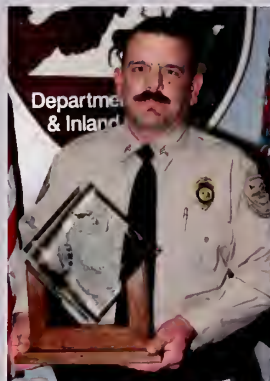
When you think about the mission of the Virginia Department of Game and Inland Fisheries, you have to think about the people who are working each and every day to carry out the mission. From dedicated and talented employees to the individuals and organizations that have helped support the Department throughout its 89 year history, the success of this agency has been due to people working together to protect and enjoy our wildlife and natural resources. Recently, the Virginia Mid-Atlantic Paralyzed Veterans of America (PVA), a strong supporter of the Department for more than 10 years, presented the Board of Game and Inland Fisheries with a check. Over the years, they have helped to raise over \$30,000 to provide fishing opportunities for all Virginia anglers. Projects funded with their support include handicapped-accessible fishing piers across the state. The Department currently has 38 accessible fishing facilities ranging from fixed fishing piers on lakes and rivers to accessible trails for shoreline fishing.

Successful partnerships such as this often begin with relationships between members of the public and individuals within the Department, such as the relationship Phil Lowmes has with members of the PVA. Phil was recognized at the annual conference of the States Organization for Boating Access for his continued contributions to creating new boating access.

Two of our fisheries professionals, Tom Gunter and Bud LaRoche, were honored for their years of outstanding service managing Virginia fisheries. Tom was recognized by the Fly Fishers of Virginia for his efforts in protecting and restoring Virginia's American shad and striped bass. Bud was recognized by the Virginia Chapter of the American Fisheries Society for his significant contribution to fisheries science in the Commonwealth. These are just a few of the people, behind the scenes, who raise the quality of your outdoor experience and ensure that these resources will remain for future generations.

As we manage wildlife and fisheries populations, we also have the responsibility to protect the resources along with the folks who hunt, fish, and boat. Each year the Department recognizes an individual game warden for his or her contributions to these efforts. The 2005 Game Warden of the Year is Sergeant Henry W. "Hank" Garner. In his 18 years with the Department, Hank has earned numerous qualifications and has gone beyond the call of duty by using his skills to train other game wardens and to become a leader in his community.

The work by these devoted professionals translates our written mission statement into action. Written at the bottom of this page each month are these words about Virginia Wildlife magazine "Dedicated to the Conservation of Virginia's Wildlife and Natural Resources." The words in my column this month are "Dedicated to all the people working to ensure the sound stewardship of Virginia's wildlife and natural resources." Let's all give them a sincere "thank you" for everything they do.



The 2005 Game Warden of the Year is Sergeant Henry W. "Hank" Garner.

Mission Statement

To manage Virginia's wildlife and inland fish to maintain optimum populations of all species to serve the needs of the Commonwealth; to provide opportunity for all to enjoy wildlife, inland fish, boating and related outdoor recreation; to promote safety for persons and property in connection with boating, hunting and fishing.

Dedicated to the Conservation of Virginia's Wildlife and Natural Resources

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Mark R. Warner, Governor

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Thanks to the dedication of wildlife biologists and organizations like the Ruffed Grouse Society, the ruffed grouse (*Bonasa umbellus*) is one of the most common resident game birds in North America and Canada. If you

would like to learn more about ruffed grouse or are interested in forest management techniques that will benefit these birds and other wildlife species visit: www.ruffedgrousesociety.org or the Department's Web site.
©John R. Ford.



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VIRGINIA WILDLIFE

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Springtime Crappies

by Gerald Almy

What do over 20 million anglers across the country have in common? They love catching crappies!

While this black and white speckled fish is fun to go after at any time of year, it's a particularly intriguing quarry in spring, when redbuds bloom on the hillsides, willows turn lime green and gobblers call out from shoreline ridges.

Yes, it's hard to break away from trout in the mountains, bass in lakes and shad swarming up coastal rivers in April, but there's no finer time than now to go after "speckled perch." Their flesh is firm from the cold winter waters. They are either staging in tight schools ready to mate or actually up in the shallows breeding. And they are full of spunk as they pack on calories and attack lures and baits to protect their spawning territory.



©Dwight Dyke

*Tired of "crappy" fishing?
Here are 10 tempting
techniques that will improve
your next fishing trip.*



©Duane Raver



©Soc Clay

When the dogwoods are in bloom you can bet that crappie are biting. From Buggs Island Reservoir to Lake Anna, crappie can be found throughout Virginia.

Crappie fishing marks the rebirth of the angling year for many Virginians. When the big calico perch rise up from their winter somnolence and move towards shore, depositing eggs and milt along the base of submerged trees, it stirs deep roots within the angler's heart.

The fishing season is here at last. It's time to catch crappies.

These are the perfect fish for family outings and introducing people to the sport of angling. If you try to teach a novice how to fish on a difficult trout stream or a bass lake when the largemouth are in a finicky mood, you may temper their enthusiasm for the sport before it even begins to take hold. But let that same person join you on a crappie foray where fish are being fought every five or 10 minutes and you could well have an angling convert for life on your hands.

Both black and white crappies are found in Virginia's lakes, rivers and ponds. Sometimes you'll find a

mixed population, such as in Buggs Island Lake. In other waters one species may predominate.

Black crappies have a deeper body than whites and a high, arched back. The marks on white crappies form nine vertical bars while black crappies have more random speckles on their sides. Black crappies have seven or eight dorsal fin spines; whites have only six. As a rule, white crappies predominate in murkier water, while blacks favor clearer lakes and rivers.

Here are 10 tactics to help you catch both black and white crappies

this spring, based on over 30 years of pursuing these fish through Virginia.

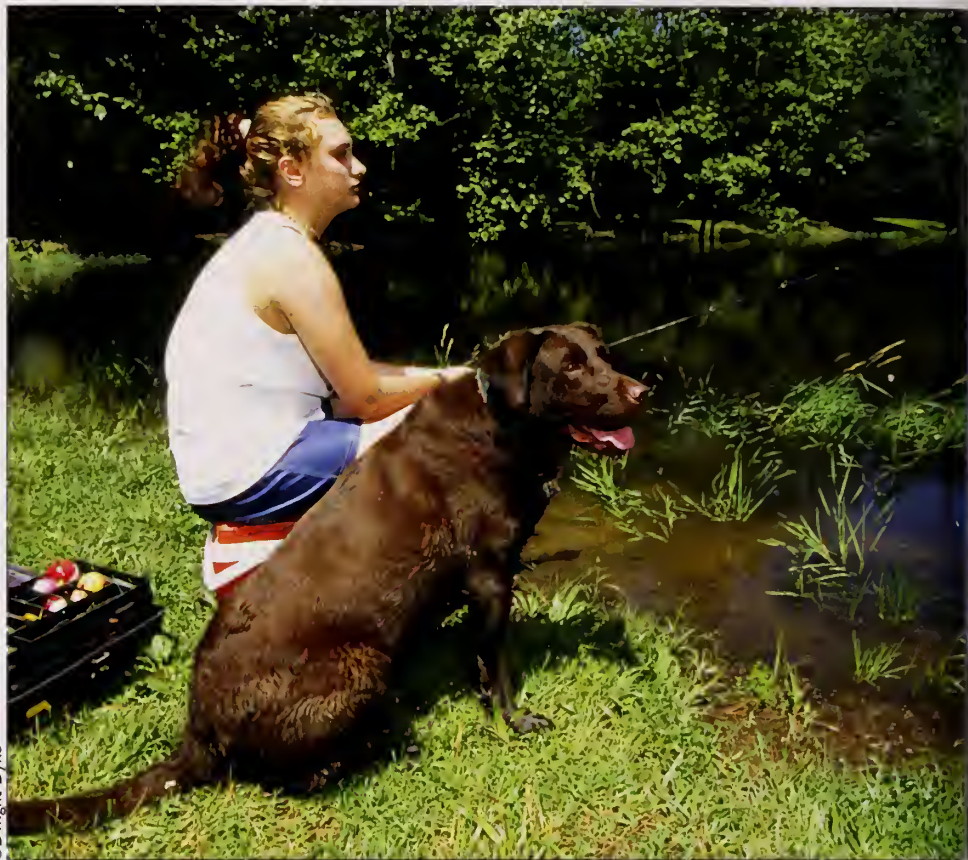
Rig up a spinning outfit.

Two kinds of outfits work best for crappie fishing—a cane pole and a spinning rig. For most situations a light or ultra light-spinning outfit is ideal. Choose a 5½ to 7 foot rod and an open-faced reel spooled with 6 to 8 pound line. As a rule, light action is better than ultra light, so you have a bit of backbone to set the hook and work fish away from snags, blow-downs or bridge pilings as you fight them.

With this outfit you can drift fish in open water, cast to shoreline cover with lures or deliver live bait beneath a float to the edge of brush and docks. It's fun to fish with and you get the most sport with the light outfit when you do hook into your quarry.

Become a kid again—buy a cane pole.

Some people consider these strictly child's toys, but a long, light rod that you can reach out with and place baits or lures next to cover is actually a very efficient angling tool. You can use the humble bamboo pole or modern versions made of fiberglass or graphite. A small reel can be attached, or the line can simply be tied to the end of the rod's tip. Nine to 12 feet is a practical length range. Another option is use an 8 to 9-foot fly rod. Fill a spare reel with a small



©Dwight Dyke

A good way of catching crappie is from a boat close to standing structure, but crappie can also be caught from shore by drifting a live minnow under a bobber.

Drift-fish the staging areas.

When winter starts to break and water temperatures rise into the low 50s, crappie stir from the depths and begin a slow movement towards the shoreline. But they don't move right up onto the banks. This process takes days, even weeks and you can often enjoy excellent action on these fish schooled up just off the spawning beds ready to move in for the mating ritual.

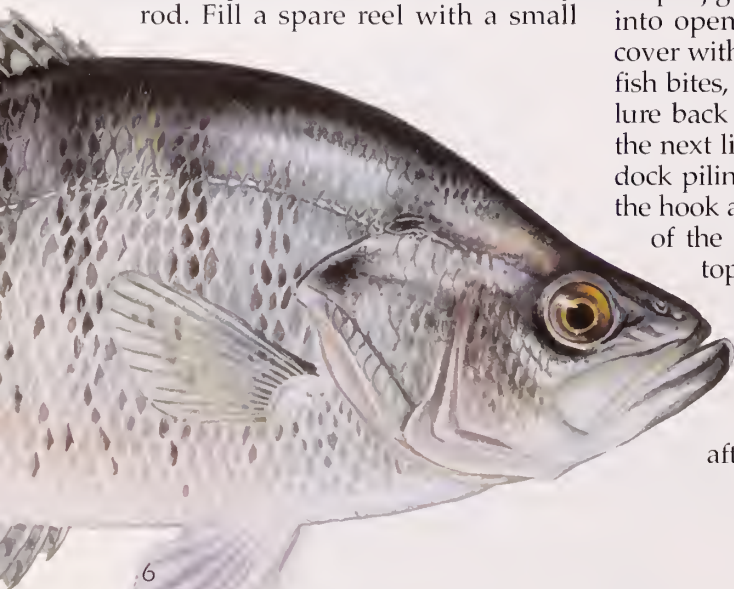
Another situation when these off-shore waters are productive is when a cold front blows through. Even if the fish were already in the shallows getting ready to breed, this tends to make them pull back deeper for a few days until the thin water warms again.

Drift fishing is a great way to take these crappies, since it allows you to cover lots of water and pinpoint roving schools. Concentrate on the mouths of feeder creeks, drop-offs, points, bridge pilings, creek channel edges and brush piles or structure in

amount of monofilament and use it like a classy cane pole.

This type of outfit is perfect for working along the shoreline in areas with scattered trees in the water or brush piles, since it allows you to drop a jig or minnow straight down into open pockets in the tangle of cover without getting hung up. If no fish bites, you simply lift the bait or lure back up and drop it alongside the next likely looking brush pile or dock piling. When a fish strikes, set the hook and quickly work it up out of the tangles and then over the top of the cover to the boat.

This rig also works well for dropping lures or baits alongside bridge pilings, where crappies often hang out before and after the spawn.





Bobber watching while fishing for crappies is a great way to keep a young angler hooked all day long.

deep water. A spinning outfit or cane pole can be used for this fishing, and three different riggings work well. The first two use minnows, the third jigs.

The first setup simply consists of a cylindrical bobber, a split shot or two and a fine-wire #1/0 to 4 hook, preferably gold. Lip-hook a 1½ to 2½-inch minnow and drift over likely areas with floats adjusted to different levels from 4 to 8 feet.

A second rig is a variation of this that uses a jig instead of a plain hook. It can be fished alone or with a minnow attached.

The final setup for drift fishing is a "tight line" rig. This consists of a 1 to 2 ounce dipsey or bell sinker on the end of the line and droppers 18 and 36 inches above that with fine wire hooks attached and live minnows for bait. The sinker bounces on the bottom while the minnows float up higher in the strike zone.

If several fish strike in one area, anchoring and still fishing or casting to that spot is an option. Often, however, you'll catch more fish by simply drifting through that productive area

over and over. If the wind is too calm for drifting, try slow trolling with the electric motor or sculling with a paddle.

Fish the right structure in the shallows.

Once fish move out of the depths to spawn and the weather stabilizes, concentrate on wood structure. Blowdowns, stumps, brush piles, docks, beaver huts and any wood cover are worth fishing.

If this type of cover is hard to find, don't neglect the edge of weed beds. Though often thought of more as bass or pickerel cover, weeds will attract and hold crappies in the shallows, especially if there are no submerged trees or brush piles around. They not only provide cover, they offer oxygenated water, too, through photosynthesis. They

also harbor baitfish and insects that crappies feed on.

Fish shelters planted in lakes are also worth trying, and don't overlook bridge pilings. In summer you may find fish concentrated around pilings far out near the river channel, but in spring look to the first two or three sets of pilings closest to the shore in all major creeks and even the main bodies of lakes.

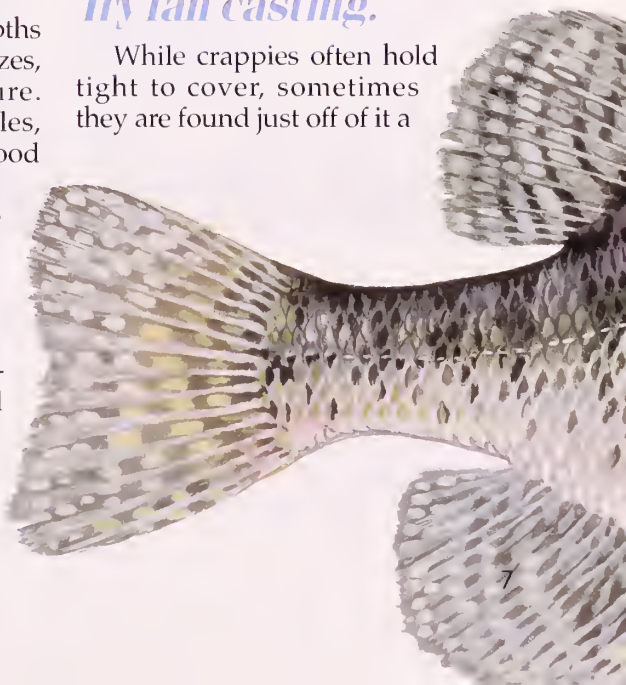
Stock a variety of jigs.

You can catch crappies on lures such as spinners, crankbaits, spoons and spinnerbaits. None of them, though, will hold a candle to the humble jig.

It's important to stock a variety of these lures, however, since the fish can be picky from day to day and on different lakes as to what type of jig they prefer. Weights can range from 1/64 to 1/8 ounce, with 1/16 and 1/32 often best, depending on the type of fishing you're doing. Though not used as often as in the past, chenille bodied jigs with a marabou tail can be deadly on crappies. More often than not, soft plastic bodies adorn crappie jigs today. Try stubby bodies and short or stiff tails on cold days, fluttering type tails when waters are warm and fish are more aggressive or if the lake is murky. Also stock a few weedless versions such as the Charlie Brewer Slider design. Best colors are chartreuse, white, black, yellow, smoke, pumpkinseed and pink.

Try fan casting.

While crappies often hold tight to cover, sometimes they are found just off of it a



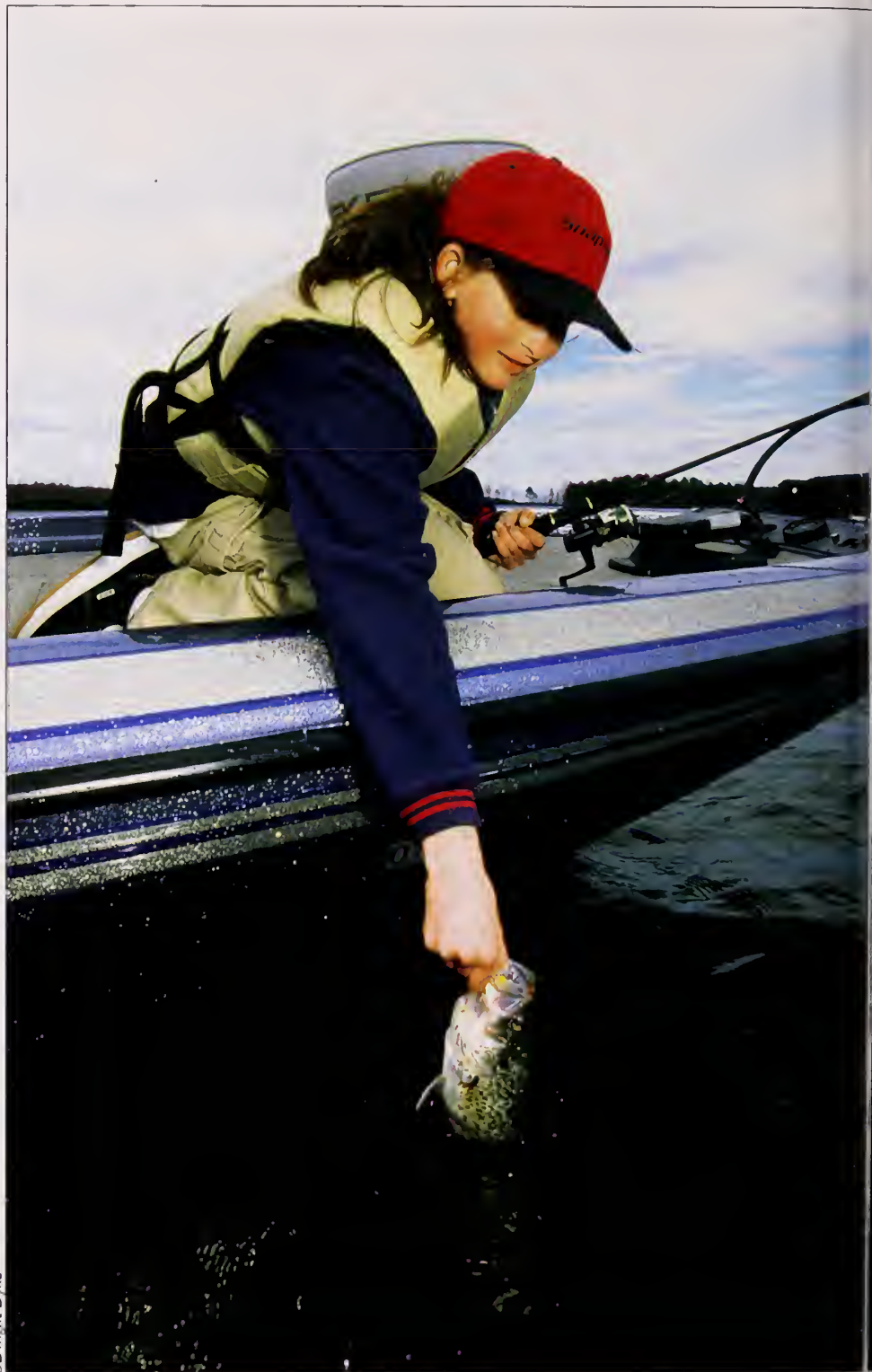
Try Fly Fishing

Not many people try it, but you can enjoy exciting sport catching crappies with a fly rod and streamers. Start with an 8 to 9-foot rod that balances with a 5 to 7-weight line. Use either a high-density sinking tip line or a floating one in a weight-forward design. In the latter case you'll want to add a split shot or two a foot above the fly. Attach a 7 to 9-foot tapered leader to the end of the fly line with a 4 to 8-pound tippet. Good fly patterns include the Clouser Minnow, Woolly Bugger, Zonker and Grey Ghost, in sizes 1 to 4.

Cast the fly to cover or open water just off from brush and let it sink a few feet. Then begin a slow retrieve in short, spurting strips. If that doesn't produce, try a steady hand-twist retrieve. Chances are you'll soon be rewarded with a solid tug and a scrappy crappie thrashing on the end of the line.



©Dwight Dyke



©Dwight Dyke

short ways in slightly deeper water. In other lakes cover may be fairly scarce and the fish often rove in open water. This is the perfect setup for fan casting. Use a light spinning outfit and a jig in the $\frac{1}{8}$ to $\frac{1}{16}$ ounce size and cast towards any cover near shore such as tree limbs, dock pilings, piers or brush.

Keep reeling even when the lure gets past the cover. Often you'll catch the heavier females halfway back to the boat where they are staging before moving shallow. Pause now and then to let the jig drop deeper, but other than that, no twitching or jigging of the rod is necessary. In fact, the smoother the retrieve, the better.

Crappie can be finicky feeders and easily spooked. The preferred method for catching them is with light tackle that includes long and limber spinning rods, 4- to 6-pound test fishing line, and small minnows or lures.

Fish with minnows in the shallows.

When the majority of crappies move in tight to cover and begin the spawning ritual, it's time to pull out your cane pole and use it to flip minnows into pockets in brush and next to logs and dock pilings.

Slip on a cylindrical float 18 to 48 inches above a fine wire gold hook with a split shot or two crimped on a foot above the bait. Use a length of line equal to the "pole's" length or slightly shorter and simply reach out and place the minnow exactly where you want it next to a blowdown or sunken brush. If a fish is there, you should know within a minute or two. If nothing strikes, lift it straight up and drop it down beside the next piece of cover.

Dap with jigs in the shallows.

This is a variation of the technique above, and in some ways it's an even more exciting method. Instead of see-

ing the float disappear, you feel each strike with this tactic. Simply tie on a $\frac{1}{8}$ to $\frac{1}{32}$ ounce jig and lower it down next to brush, tree limbs, stumps, beaver huts, weed beds, dock pilings and other cover you find in the shallows.

At this point you'll probably be tempted to jiggle or twitch the lure. Don't. Instead of moving it, simply hold it steady next to the cover. Your hand is actually trembling enough to give the jig a life-like, quivering motion, something like a minnow rotating its pectoral fins. That's enough to draw a slamming strike from any nearby crappie protecting its nest.

After holding it steady next to the cover for a minute or so, slowly swim the jig around a bit with a smooth motion to the other side of the tree or piling. Wait a few seconds longer, then lift the lure up and place it next to another likely looking spot. This method lets you probe the very best cover quickly and usually results in a heavy catch by day's end if the fish are in the shallows. Whether it's hunger or territorial instinct that

can rectify that situation by creating your own.

First make sure there are no restrictions on this from the lake owners. After you've checked into that, gather up some old tree tops, cedar trees, shipping crates or artificial structure that you build yourself, weight it down with wire and either large rocks or cinder blocks, then drop it off in prime areas just offshore from spawning spots. Mark the cover by triangulation with landmarks on shore and jot it down in a notebook or store its location in a GPS unit so you can find it later.

It may take just a few days or it may take a month, but soon minnows will begin hanging out around the new structure and crappies will follow them in hot pursuit. Then you'll have your own private honey hole to fish as crappies move up towards the shallows to spawn and back out after breeding is finished. Place structures at several different depths from 8 to 20 feet and they'll produce during a variety of weather and seasonal conditions.

Try night fishing.

This technique is a good one to turn to as crappies complete their spawning and start to head back for deeper water in May, and it can produce right through the hot summer months. Hang several lanterns over the side of the boat or use a plastic foam-mounted light that floats and runs on a 12-volt battery. Another option that can produce even now in April is to fish around docks that have lights.

In both cases the illumination draws in insects and baitfish, which in turn lure in any nearby crappies. Cast jigs near the lights, using a float to suspend them or bait fish with live shiners. If bites start slowing towards dawn, raise your bobber to fish at a higher level, since the fish often move up in the water column as daylight approaches. □

Gerald Ahmy is a full-time outdoor writer and photographer and has been a regular contributor to Virginia Wildlife magazine for over 20 years.



Many experienced crappie anglers will use live minnows to locate a feeding school of crappie and then switch to a good selection of small, colorful jigs.

makes them strike these jigs is hard to say, but strike them they do—often belligerently!

Create cover.

The one thing that's lacking in many crappie lakes is sufficient cover for these structure-loving fish. You

The Art of

by Jim Crosby

Ken Burklow is an artist and craftsman originally trained as a bench jeweler and designer. He now offers, "fine hand engraving" from his home in Ruckersville.

The yellow frame house sits above the street with a paved driveway that rises steeply to the carport with no visible evidence or signs of the genuine creativity being handcrafted inside. While Donna and his children are away working, going to school and attending college, Ken holds forth alone with his home-based business.

Hailing from Evansville, Indiana, Ken came from a family of nine children. He took a round about route to end up in Ruckersville, just north of Charlottesville on U.S. Route 29.

Having been involved in the jewelry business as a clerk, jeweler, employee and owner, he came to Virginia to become general manager of Keller & George Jewelers in Charlottesville in 1995. When his own engraving work got to be 35 to 40 hours a week, he de-



©Soc Clay



Firearm Engraving

A local craftsman tries his hand at the art of engraving firearms.

cided to leave Keller & George to become entirely self-employed.

He now does work for about 15 jewelry stores in addition to his own engraving work on firearms, knives, belt buckles and trophy cups. He engraved a cup a few years back that was presented to the Queen of England.

At 48, Ken says, "I am doing what I truly love. I could be doing things that would produce a lot more money, but I could not be happier."

"Once I moved into management in the jewelry business, I began to



©Jim Crosby

Over 30 years ago Ken Burklow began his career as a jeweler. He quickly developed an excellent eye for design, which would guide him to become a self-taught engraver.



©Jim Crosby



From classic handguns to ordinary rifles Ken Burklow's hand engraving skills have turned everyday items into works of art.
 Photos ©Jim Crosby.

teach myself to engrave. After five years of study and work, I put my first piece out for sale."

Ken explained, "Fine hand engraving came to this country through emigrants, however, today some of the finest hand engraving work comes from the United States. The finest engraver in the world currently is a fellow from Vermont whose name is Winston Churchill."

When asked about the difference between hand engraving and machine engraving, Ken used this analogy: "It's like the difference between plowing a field and digging a ditch. Plowing only moves the dirt around. When you dig a ditch, you have to remove the dirt. Machine engraving only moves the metal around. When you hand engrave, you actually remove the metal. Good hand engraving leaves the surface smooth when you run your finger across it. Machine engraving leaves a rough surface from the metal pushed up by the tool."

Ken explains, "Machine engraving came about in the 20s. I remember in the 70s, we [jewelers] charged



10-cents a letter for machine engraving and 20-cents a letter for hand engraving. When people asked what was the difference, we explained that hand engraving was much more durable and lasted forever when machine engraving would wear away eventually."

Ken belongs to the Firearms Engravers Guild of America. He is not only a very respected firearms engraver but loves to shoot them as well. He is an avid outdoorsman and a member of the Rivanna Rifle & Pistol Club near Charlottesville where he participates in club competition. His favorite activity is cowboy shooting.

On his engraver's block, Ken had the bottom plate from a rifle he was working on. He demonstrated his art by working the piece for me. The plate is locked into the block that allows it to be moved in every direction on the horizontal plane but not in the vertical plane. This is necessary because you move the work to the graver point instead of the point to the work while you must maintain the focus of the binocular microscope.

Two modern innovations to the hand engraver's work are: the binocular microscope which offers great magnification and depth perception of the minute detail you are working with, and the air driven engraver's tool that resembles a miniature jack-hammer is a time saver. The power unit sits on the back of the workbench and is connected to the tool by an air tube that vibrates the tip, which is held in the hand. Originally, the engraver had to hold the tool with one hand and tap it with a hammer held in the other. This tool's vibration replaces the hammer and therefore can be operated with one hand leaving

the other free to maneuver the piece being engraved.

Ken explained that when doing gold inlay, the engraver has to under cut the line so that when the gold is tapped into place, it is locked into the under cut and can not be peeled off.

He buys his gold as fine wire for lines and in sheets for large areas to be inlaid.

The whole operation looks so easy that one could be convinced anyone could do it. But then doesn't every true craftsman make his work look



©Jim Crosby

Ken will often sit for hours behind his binocular microscope working with an air driven engraver's tool. Both tools are relatively new and have greatly added to the quality of his work.



easy? The proof of the true craftsman lies in the appearance of the finished piece and for Ken, that is reflected in all the examples of his work. His work is not just eye-catching but more like breathtaking. □

Jim Crosby is a regular contributor to Virginia Wildlife. He is an avid shooter and member of the Rivanna Rifle & Pistol Club and the National Rifle Association.



More Information

To see an even greater variety of Ken's work, visit his Web site at: www.kenburklow.com.

The Firearms Engravers Guild of America (FEGA) was founded in 1981 to provide opportunities for engravers to exchange ideas and knowledge, assist in improving individual skills, promote firearms engraving as an art form, and to raise public interest and appreciation in quality firearms engraving. Visit them at: www.fega.com.

The Rivanna Rifle and Pistol Club, P.O. Box 3246 University Station, Charlottesville, VA 22903-0246; Web site: www.rrpc.org.



Ken puts the finishing touches on the bottom plate of a rifle. When he's not at his engraving bench he can usually be found with his wife and two children enjoying time in the outdoors or participating in his favorite sport of cowboy shooting. Photos ©Jim Crosby.

Bird Habits: Strangely Curious

story by Carol A. Heiser
illustrations by Spike Knuth

It certainly takes a lot of guts to run out in front of a car to protect your offspring... Or is it more likely instinct? A few years ago I had occasion to observe a bird doing just that, while I was on a foray at a local golf course. The weather was warm, the windows were down, and I was maneuvering my car very slowly around the edge of a gravel-lined curve looking and listening for birds along the perimeter of the grounds. From seemingly out of nowhere a killdeer—a plump, brown and white plover with two dark breast bands—dashed towards my vehicle, frantically screaming at the top of its lungs while dragging one of its long pointy wings behind it, feigning injury. With high-spirited determination the plucky little bird proceeded to accost the car, running back and forth towards and away from the front wheels, apparently doing its best to either get the car's attention or frighten it away. When I got out and walked carefully around, I discovered the reason for the bird's fervor: a shallow depression in the gravel containing four buffy, splotch-marked eggs, exceptionally camouflaged against the surrounding stone. For this species, survival meant ensuring the future success of those eggs, even though the risk of defense by pretense might mean being crushed by a two-ton 'predator.' Although birds may act rather strangely and appear to do bizarre things, every behavior has a definite purpose related to survival, whether it's nest protection, territorial defense, feeding habits, communication with flockmates or courtship.

When danger seems to threaten, a killdeer acts out a broken wing display to distract a potential predator away from its vulnerable nest, which is a mere shallow scrape in gravel.



Birds of a Feather

In many cases, plumage is an important factor that's used to signal a bird's status in the flock, which in turn may convey subtle advantages in finding the best food, cover or mate. For example, the white-throated sparrow, which we usually see over the winter months or while the birds are passing through on spring migratory routes, relies on plumage to indicate dominance based on sex and age, with brighter plumage signaling higher rank. The color pattern on the crown of these

birds consists of light and dark stripes. On some birds the stripes are quite white, while on others they're more tan, and the color pattern remains the same throughout life. Interestingly, the expression of this gene for plumage variation also affects individual and flock behavior. Male sparrows with brighter white stripes tend to be more aggressive and sing more, and they tend to prefer mating with tan-striped females. It is believed that these color differences enhance a dominant bird's feeding success so that it has more time to forage and put on more body fat, while also giving it better access to sheltered roost sites. This dominance hierarchy—where male birds rank higher than females, and older birds rank higher than younger ones—also

minimizes the amount of fighting that goes on and, thereby, saves the birds' collective energy. Energy is the name of the game, because the efficient use of energy is vital to successful nest-building and brood-rearing. Some species exhibit a dominance hierarchy, or pecking order, without the plumage differences, as when blue jays chance upon a food source. Usually only one jay eats at a time while the others wait their turn at a distance.

A male red-winged blackbird broadcasts his presence with loud, unmistakable "con-ga-ree" calls and proclaims his territory with an aggressive flash of his bright shoulder patches.



Signals and Displays

In other species, the use of plumage for communication is more overt. The red-winged blackbird is a species that demonstrates "sexual dimorphism" (the scientific way of saying that males and females look different), and the male has very prominent red patches on its shoulders. These patches can be flashed to intimidate a potential predator or intruder, impress nearby females, or get a rival bird to take notice, often while the male is singing on territory during the breeding season. The male spreads out its wings and tail while emblazoning the epaulets—a bright warning sign or attention getter that proclaims an unmistakable message, depending on the context. If the bird is trying to attract a mate (one male red-winged mates with several females in its territory), the body language says in effect, "hey baby, take a look at me." If the bird is defending a territory against other males, the message is, "this is my turf, beat it."

In the more diminutive ruby-crowned kinglet, a male bird also relies on a red patch for similar effect, this one located on the top of its head. Usually the patch is concealed, but upon being challenged the bird raises its crown feathers. Likewise, a male ruby-throated hummingbird will brandish the red, iridescent feathers of its gorget and admonish with bursts of scolding twitters.

Behavior, therefore, functions either as a basic signal to connote dominance and elicit a response in another bird, or as a ritualized display of a well-defined set of movements intended



Courtship Rituals and Nest-Building

Ritual displays are the hallmark of much courtship behavior, and backyard bird-watchers often get a front-row show. I once watched a male ruby-throated hummingbird repeatedly dive in front of a female that was sitting quietly on a perch about a foot off the ground. His aerial acrobatics traced a U-shaped dive that started about 25 feet above the ground and raced downward at an incredible speed to within a few feet of the female, then back up again. After several displays like this—accompanied by a constant chatter of vocalizations—he changed his tempo and swung back and forth in much shallower arcs in front of the female, as if to gauge how impressed she was with his overtures.

Further afield one might have the good fortune to witness or hear an American woodcock or a common snipe perform similar

spectacles. They are members of the sandpiper family, with the snipe preferring open marshy or wetland habitats and the woodcock preferring open woodland environs. In both these species the male's breeding display is comprised of a sequence of flight behaviors that begin with a steep, vertical ascent through the air, include several dips, dives and circles, and culminate in a great plunge toward the ground. Wind whistling over a snipe's tail feathers during this demonstration causes them to vibrate and make a "winnowing" (fanning) sound. The woodcock's display, which

to communicate a specific message. From waterfowl to sparrows, birds "converse" with body movements and posture, often strutting and using the head during courtship or when exhibiting aggression. Aggressive gestures can include tilting the body down and bowing the head, bobbing the head up and down, or throwing the head back with bill pointed in the air. Such ritualization is exaggerated behavior that has been repeated over and over again during a species' evolution. These ritual displays have been distilled to their simplest essence, and yet their adaptive advantage has remained intact.

Raising a successful brood of young is the ultimate goal of all birds. Hence, a male common snipe (above) expends a great deal of energy seeking a mate through a series of highly complex flight behaviors. A great crested flycatcher, however, takes care in selecting just the "right" materials for nest-building—in this case, a shed snake skin.





The mysterious, nocturnal courtship behavior of the male woodcock consists of a sequence of unusual flight displays, which begin with a direct vertical climb and end in a steep dive toward the ground. The speed of the dive forces a great rush of air over the bird's wings consequently producing a whistling sound.

is done at night, produces a high-pitch whistling sound as the air rushes over its rounded wings.

Sometimes a ritual involves a simple feeding routine between the sexes. In several species—cardinals, finches, waxwings, and others—the male bird will feed the female, either during the nest-building stage or later while she's on the nest.

Bird song is prominent throughout most of the breeding season, with males usually vocalizing more than females as they defend territory, apply their courtship skills, and participate in nest-building and brood-rearing rituals. Communicating by sound varies with the circumstance, as evidenced by the use of calls and songs. A call is a short vocalization that can signal an alarm or signal one's location relative to the rest of the flock. In contrast, a song is a more ritualized, complex or patternized method of

communicating that must be learned. Songs are highly variable and characterized by degrees of pitch, frequency, sequences of notes, and repertoires. The status of an individual bird appears to be related to the variations within its own song repertoire. Apparently the more songs a bird can sing, the more dominant or successful it will be at breeding. Mockingbirds, catbirds, starlings and other mimics have carried this benefit to the extreme.

Habits are quite varied when it comes to nest-building, too. Birds may seem to choose the unlikely places to build a nest, but in all cases they are looking for certain habitat features that will maximize their success. The most critical factors include proximity to a food or water source and the value or availability of nearby cover to escape from predators and raise the young. Methods used in nest-building can be quite intriguing and are linked to the types of materials found in the local habitat. A chimney swift builds its nest inside a chimney or hollow tree with a collection of short twigs secured together by its saliva. Barn swallows build mud and grass nests on the interior ledge of a building or bridge. Crested flycatchers weave snake-skin into their nests, and hummingbirds use spider silk and lichens. Ground-nesting wood war-

blers create nests from plant fibers and strips of bark, with the ovenbird constructing a dome of grasses and leaves overtop. Carolina wrens are probably the most notorious for their adaptability, choosing everything from coffee cans to buckets in which to build their nest.

Shopping for Food

A good place to observe all kinds of fascinating bird behavior is in your own yard, either at a feeding station outfitted with a variety of seed types or on the trees and shrubs that make up the landscape. Feeding strategies can seem highly scripted and predictable, but they're always fun to watch. The brown creeper has a slightly down-turned or "decurved" tweezer-like beak that it uses to probe for spiders and insects within the cracks and crevices of tree bark. The tips of its tail feathers are stiffened to provide a prop for balance, as in woodpeckers. One might think that a random inspection of a tree trunk would yield good results, but the creeper approaches the task in a very methodical manner. The bird begins at the bottom of a tree and gradually spirals upward around the trunk, gleaning for insects as it goes, until it reaches the lowest branches. Then the bird flies down to the base of

another tree and repeats the same upward spiraling process, round and round the trunk, from bottom to top.

In contrast, a white-breasted nuthatch tends to reverse the pattern by exploring from the upper reaches of a tree-trunk down towards the ground. This bird does not use its tail for support but instead relies on long toes and sharp claws to cling to bark, using one foot to hold on and the other for balance. Its beak is short and straight, adapted for pecking and prying at bark to find small insects as it moves down the tree, perhaps finding food items that creepers and woodpeckers do not see on their way up. Nuthatches also eat seeds and nuts and are known to pillage great stores of sunflower seeds from feeders, caching them for a later feast. This bird cracks a seed by jamming it into the tree bark and 'hatching' or hammering it open. In general, birds that cache food—which include other songbirds like chickadees and jays as well as most woodpecker species—will do the majority of their hording in the morning and then return to feed late in the day, a strategy that builds energy reserves within the body in anticipation of the overnight fast.

Yellow-bellied sapsuckers cache seeds and nuts, too, but they also have a unique ability to tap into another part of a tree's energy reserves—its sap, which contains between 10 to 20 percent sugar, depending on the tree species and how far along it is into the spring season. This persistent member of the woodpecker family drills parallel, horizontal rows of holes around a tree trunk. Each hole is shaped like an inverted cone and, therefore, acts as a tiny reservoir or well that holds the sap and minimizes the amount that oozes out. The sapsucker periodically returns to the tree and inspects the wells, sipping the sap and taking advantage of any insects that might have become trapped in the sticky substance. Dunn reports that "one bird was recorded sipping over 500 times an hour for eight and a half straight hours" (p. 81, *Birds at Your Feeder*). Sapsuckers also feed on the inner bark of trees, called "bast." Landowners often complain that the sapsucker is causing unnecessary harm to their trees, but many of the trees used by these birds tend to be in some type of decline or stress already, and the bird is attracted to tree wounds or damage.

Foraging behavior on the ground involves a different routine, with specific actions tailored to the type of habitat or food source that a given species might require. The most basic form is the 'stand-still and watch' routine which is easily observed in robins, who periodically stop and then hop as they look for and find their prey in lawns and other open areas. Brown thrashers and several sparrow species that spend a majority of



While circling around a tree trunk in an upwardly spiraling track, a brown creeper methodically probes for insects within the bark's tiny cracks and crevices, relying on superb skill and a specially adapted down-turned beak.



Commonly seen around backyard bird feeders, the white-breasted nuthatch stashes seeds within the convenient nooks of tree bark, saving the food for a late day meal.

Virginia
Naturally

time on the ground will jump back and forth in leaf litter and momentarily stop to see if they've stirred up any insects. Bluebirds tend to perch on a lookout and sally forth to the ground, stopping only briefly to nab an insect and then fly back to the perch.

Great blue herons hunt with a much slower, more deliberate set of movements. A heron will stand like a statue in a shallow marsh for minutes on end, head poised motionless, vigilant for the slightest flicker of movement in the water. When it becomes necessary to change locations, the bird gracefully picks up one of its long, lanky legs and takes a careful step in slow-motion to another spot, never taking its eyes off the water. Eventually an unsuspecting fish or amphibian swims lazily by, and the heron stabs at the water with lightning speed and precision, capturing the prey with its beak like a spear.

Some birds forage almost exclusively on the wing, such as the nighthawks and nightjars, known collectively as "goatsuckers." These birds have a wide, gaping mouth that acts like a net which can sweep mosquitos, moths, flies and other aerial insects directly into the gullet. The

birds' wings tend to be pointed and adapted for abrupt changes in flight, and as a consequence it's not unusual to see a wide range of aerial acrobatics on a summer's night.

Did You Know?

Vultures have some peculiar behavioral strategies for regulating body temperature. On a cold morning when the goal is to find warmth, a vulture will perch in a treetop roost with its wings fully extended, maximizing the amount of dark surface area that will pick up the sun's rays and dry the feathers which may have collected dew overnight. At the other extreme, in order to keep cool, a vulture vomits and defecates on its bare legs and feet, a method that promotes evaporation and thereby carries away body heat.

Learning More...

Birds at Your Feeder: a Guide to Feeding Habits, Behavior, Distribution and Abundance, by Erica H. Dunn and Diane L. Tessaglia-Hymes; c. 1999, Cornell University Laboratory of Ornithology; W. W. Norton & Co., NY; 418 pp.

A Guide to Bird Behavior: In the Wild and at Your Feeder, by Donald W. Stokes and Lillian Q. Stokes (vol. 1, 1983; vol. 2, 1985; vol. 3, 1989); Little, Brown & Co.; 330+ pp.

The Sibley Guide to Bird Life and Behavior, edited by Chris Elphick, John Dunning Jr., and David Allen Sibley; c. 2001 Chanticleer Press, Inc.; Alfred A. Knopf, Inc.; 608 pp.

Why Birds Do That: 40 Distinctive Bird Behaviors Explained and Photographed, by Michael Furtman, Steve Maslowski, and Dave Maslowski; c. 2004 Willow Creek Press; 96 pp. □

Carol A. Heiser is a Wildlife Habitat Education Coordinator with the Virginia Department of Game and Inland Fisheries.



A Different **Drummer**

*Can we pick up
the beat in
Virginia's uplands?*



© John R. Ford

by Gary W. Norman,
Ruffed Grouse Project Leader

The chorus of songs and sounds at dawn in Virginia's upland habitats offers a rewarding experience to those outdoorsmen and women afield in spring. I personally enjoy the melody of the wood thrush, their flute-like songs add to my enjoyment of spring and summer jaunts. The booming gobble of a wild turkey is perhaps the most boisterous spring call in our uplands and leads many to become addicted to spring gobbler hunting. Male ruffed grouse find a prominent downed log and from this stage they pump their wings together, slowly at first, building in momentum, to pro-

duce the sound commonly referred to as a drum. Most spring songs and sounds are associated with some aspect of mating or territory defense. While rewarding for those that take advantage of nature's spring music, the calls of many wildlife species are also useful to wildlife managers that monitor their population trends and abundance.

In the case of ruffed grouse, the frequency of drumming is an excellent index to population trends. Each

During the six-year study a total of 3,118 grouse were captured and fitted with radio telemetry devices. This allowed biologists to track their movements, survival rates and reproductive success.

spring the Department conducts surveys throughout the grouse range to monitor the number of drumming birds along secondary roads. These "roadside" survey routes were selected at random to reflect broad scale population patterns. The routes are 10 miles in length and consist of 10 stops at 1-mile intervals. At each stop the number of drumming males is counted during a 4-minute listening period. The survey begins a half hour before sunrise as drumming normally peaks at daybreak. Surveys are conducted twice in the spring, during the first two weeks of April.

The Department also asks avid spring gobbler hunters to report the number of drumming grouse they hear during spring gobbler hunts. Each year approximately 500 spring gobbler hunters from around the state volunteer to participate in our Spring Gobbler Hunter Survey. In addition to useful information on wild turkeys, these cooperators provide another valuable index to drumming and grouse abundance.

Both drumming surveys in Virginia indicate grouse populations have declined in recent years. As recently as 2001, populations were much higher but we've experienced a steady decline since then. Fluctuations in grouse numbers, as in other upland game birds, are normal and can be seen in Figure 1. Unlike their northern counterparts, Appalachian grouse do not follow a predictable 10-year population cycle. The data from the Spring Gobbler Hunter Survey



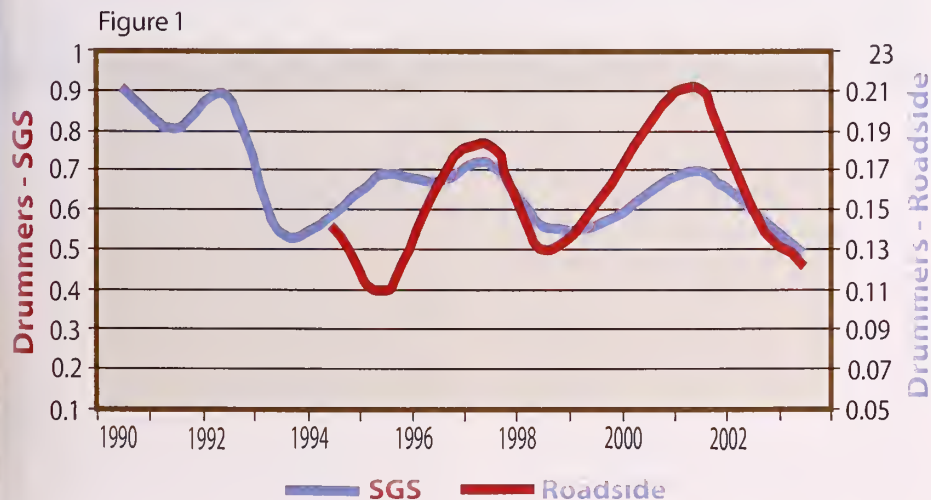
© Dwight Dyke



provides a better long-term view of grouse population trends and those data suggest a troubling decline in grouse numbers in the Old Dominion. This trend can be seen through-

out the southern and central Appalachians as much of our forestland is becoming too mature for ruffed grouse. Concern for the status of ruffed

grouse led the Department to sponsor research on factors contributing to the apparent decline in grouse numbers. Avid ruffed grouse hunters have been concerned about declining populations as they have been flushing fewer birds over time. Most states in the central and southern Appalachians region have grouse seasons that extend into January and February. Some hunters and outdoor writers have voiced concerns that hunting seasons were too long and

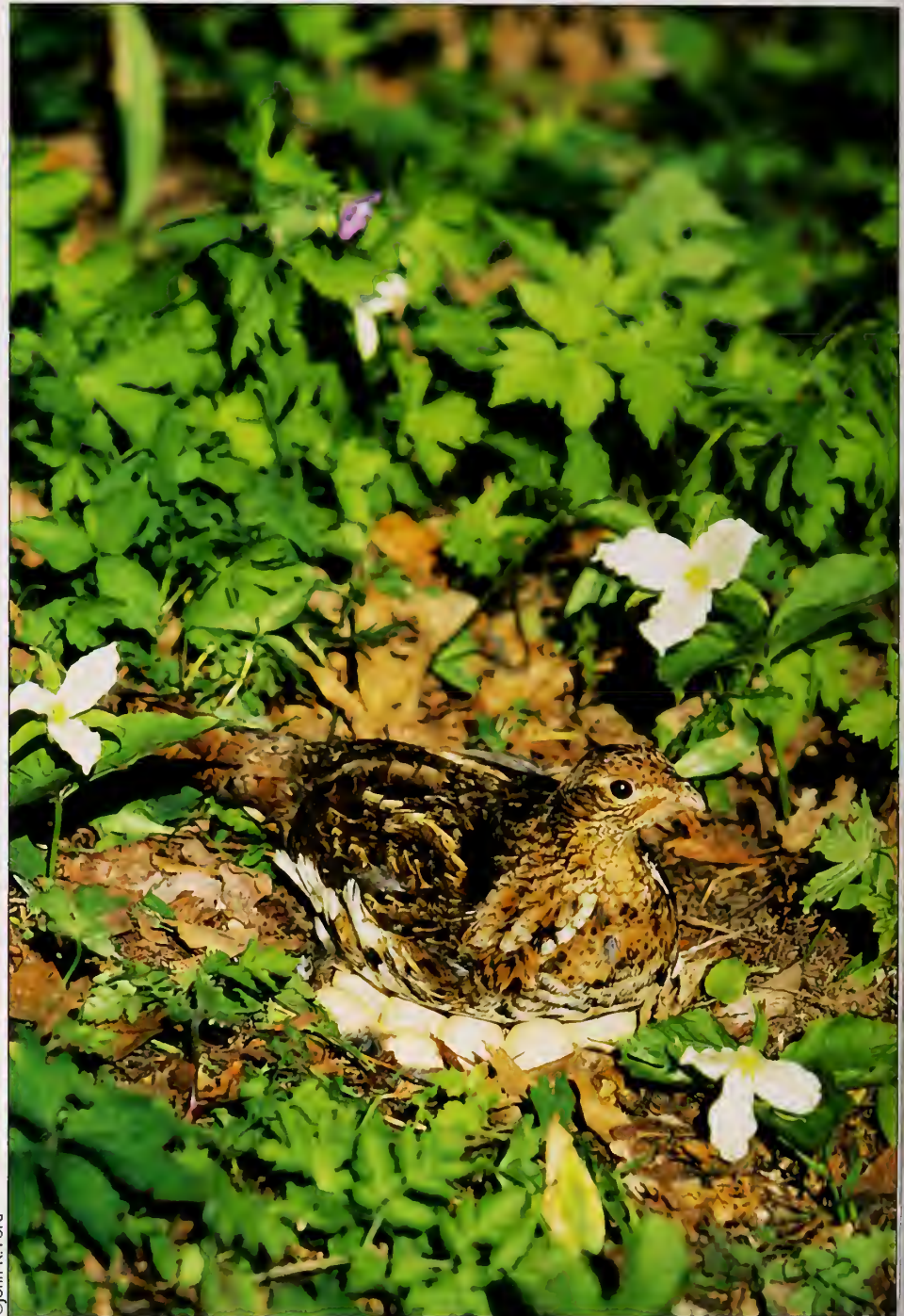


During the spring, roadside surveys were used to listen for drumming grouse. Since 2001 the survey has shown a sharp decline in the number of drumming grouse.

late season hunting, in particular, was hurting population levels.

Because of the regional concern for grouse and wide implications for grouse season lengths, eight states decided to work together to solve the questions and address the concerns about grouse populations. A cooperative project entitled "Appalachian Cooperative Grouse Research" was begun in 1996 with the goal of solving many of these management questions. The ambitious 6-year project resulted in one of the largest wildlife studies ever conducted on ruffed grouse. The collaborative effort involved contributions and coordination of 17 graduate students at eight universities. Over the eight cooperating states 3,118 ruffed grouse were captured during the 6-year study. Radio telemetry was used to track their movement, survival and reproductive success during the study. More than 67,000 telemetry locations were made to locate and track movements and dispersal. Reproductive efforts of 437 female grouse were intensely monitored to verify nesting efforts, nest success and chick survival. To monitor survival of grouse chicks after hatching, some chicks were captured and equipped with state-of-the-art miniature transmitters. Some grouse were collected each spring to monitor food habits and body fat levels to evaluate the impacts of nutrition and condition on grouse survival and reproduction. Finally, and perhaps most importantly, some study areas were closed during the last 3 years of the study to evaluate the impacts of hunting on survival. If hunting was affecting populations then the closure ought to result in a significant improvement in survival and subsequent population densities.

While Appalachian grouse populations appear to be struggling, their northern counterparts in the Lake States and Canada appear to be doing better. To assess the status of these populations, biologists must examine two important factors that affect population changes. Those factors include survival and reproduction. Survival is commonly measured as a rate or percentage. The rate



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can be interpreted as how many animals out of an initial population of 100 survive the year. While survival is a key factor, reproduction is equally important. Reproductive efforts replace those animals lost during the year to predators or other factors and effectively replenish the population. Reproductive efforts can offset low survival rates. In contrast, the importance of reproductive success is low in populations with high survival rates. Both factors, survival and re-

An important part of the six-year study was learning more about the nesting success and the survival rate of grouse chicks.

production, work in concert to result in populations that are either stable, increasing, or decreasing.

We compared survival rates in our study to those of northern populations. We found survival rates of Appalachian grouse are generally higher than the northern states where



Data from the study indicated that the survival of the "king of game birds" largely depends on their habitat, quality of food and successful reproduction.

aspen dominates the diets of birds. Survival rates of Appalachian birds averaged 42 percent compared to studies in the core of grouse range that found survival ranged from 25 to 35 percent. There are many potential factors that may be contributing to these survival differences, including several environmental conditions. Environmental settings are quite different between these populations as the northern birds typically have a

very reliable and readily available food source in aspen buds and have the thermal advantage of being able to burrow into deep snow in the winter to conserve energy. Snow roosting takes place in the Appalachians but we often found grouse nesting in oak leaves to help ward off the cold. The thermodynamics of the oak leaves are not as advantageous as snow.

So if Appalachian grouse survival rates are better than the northern populations, why aren't our population levels higher than theirs? The answer is that the equation for population growth not only includes survival but reproductive success as well. We found Appalachian grouse reproductive parameters were generally similar to the northern birds but several key parameters were lower. The most limiting factor affecting reproductive success in the region was low survival of grouse chicks during the 35 days following hatching. Only 22 percent of hatched chicks survive to 35 days compared to 50 percent or higher survival rates in the northern populations. Weather and predation take their toll on young grouse chicks. But we also found that reproductive success was related to the hen's body fat (condition) levels going into the spring season. Hens with low or very high body fat levels didn't do as well reproducing as others with moderate fat levels. Of particular interest to managers is the relationship we found between grouse body fat levels in spring and acorn abundance from the previous fall and winter.

There are many factors that influence survival rates. Avian predation was the leading cause of grouse mortality. The timing of grouse mortality was correlated with our sightings of owls and Cooper's hawks. Hunters only accounted for 12 percent of the mortalities observed. During our test of hunting effects we found that grouse populations increased in both control and experimental areas in the 3 years where hunting was closed. Because the closed area did not increase more than the control area we concluded that current hunting levels are not having an effect on populations.

Therefore shortening the grouse hunting season would not result in a significant increase in future grouse populations. We are reluctant however, to use this logic to extend the season because at some point hunting could, and would, eventually become an additive form of mortality at higher harvest levels.

In the final analyses we found there is no quick fix for our grouse population recovery. As a grouse hunter myself, I found comfort in our results that sport hunting, at the current levels, is not limiting grouse numbers. That question is what lead to this project and answering it alone was worth the effort. Beyond the hunting results, perhaps our most important finding of the Grouse Research Project was the relationship between acorn abundance, hen condition, and reproduction. This relationship suggests that we need to be actively and thoughtfully managing habitats to provide a diversity of forest ages and stand conditions to benefit grouse. One critical component wildlife managers must provide for good grouse populations is suitable brood habitat. Grouse chicks feed almost exclusively on insects during the first 3 to 5 weeks and later shift to fruits and plant material. We found that good ground cover resulted in better brood habitat as it provided the needed quantities of arthropods, fruits, and plant material. In most woodland situations, conditions for grouse broods can be improved by thinning some trees from the canopies to allow more light and control burning the understory.

Fortunately, for all Virginians these conditions will likely provide for a great diversity of songs and sounds in spring including the wood thrush, wild turkey, and ruffed grouse. □

Gary Norman is the Upland Game Bird Project Leader for the Department of Game and Inland Fisheries' Wildlife Division.

For more information on the Appalachian Cooperative Grouse Research project visit the Department's Web site at www.dgif.virginia.gov and choose Hunting and Virginia's Game Wildlife.

VIRGINIA WILDLIFE

TWO DOLLARS
MARCH 2005

Photography Competition

Annual Photography Contest Showcase

*Increase your
chances at
having your
pictures
judged
"The Best."*

by Lynda Richardson

Have you ever entered a photography contest and never placed even one of your photographs? Upon seeing the winners you wondered, "Darn, my photographs are just as good as those winners! Why didn't I win?" Each year, there are hundreds of photography contests where thousands of photographs are submitted so as you can imagine, the competition can be very steep. For example, the 2004 "Wildlife Photographer of the Year" competition received over 18,500 entries in 15 categories. This interna-

tional competition, which has been around for 40 years, was first started with a British magazine called *Animals* that later evolved into today's *BBC Wildlife Magazine*. Every October, the winning images are displayed at the Natural History Museum in London and top winners are flown in to receive their awards. It is a really big deal. On U.S. soil, the most prestigious international wildlife competition is the *Nature's Best* magazine competition. Its 2004 contest received over 15,000 entries in 14 categories. Only 142 images were selected as winners. *Nature's Best* top winners are flown to Washington, D.C. to re-

ceive their awards during a wonderful ceremony and exhibition at the Smithsonian's Museum of Natural History.

Closer to home, we have the *Virginia Wildlife* Photography Contest. The contest has 10 categories, including two for children, and this past year drew over 1,700 submissions. Despite the lower numbers of entries, competition is still steep. After speaking with several folks involved in the organization and judging of large contests, I came up with the following suggestions, which might help you increase your chances at becoming a winner!

IONS

Follow the Rules

You might find this hard to believe but sometimes simply following the contest rules can be a good place to start. Nothing turns a judge off more than a sloppy submission, which has no name on it, is missing a delivery memo or contains bad du-

plicate slides or prints. With all the images to look at, the last thing the judges want to do is fumble through bad paperwork. The rules are created to help the judges with the judging process. In a tiebreaker, a well-organized and professional looking submission will win over a hand-written note on torn paper. Make sure when you are getting your slides or prints together, to follow the rules TO THE LETTER!

Look Professional

Along the same lines as following the rules is how you present your photographs. First impressions do count for something! Put your slides in new, clear, and clean slide pages. Prints can be placed in clear pages as well. Make sure all submissions are labeled according to the rules, which normally would have you include your name, address, phone number and an identification number on each and every entry. If a submission needs to be divided by categories...do it! Nothing is more irritating to a judge than finding categories all mixed up on one sheet.

Some contests allow you to submit everything in one mailing envelope as long as it's properly separated

while others prefer a separate mailing envelope per category. Pay attention to all these requirements!

All written materials like delivery memos should be typed, not hand written. Labels on your images should be typed as well. Place everything in an organized, easy to open package. Don't wrap your package with yard after yard of tape or it might never be opened! Make things as easy for the judges as possible.

Consider The Categories Carefully

One way you can increase your chances of winning is to enter categories with the least amount of competition. In *Virginia Wildlife's* contest,



Left: There are loads of photography competitions out there for you to enter. Above: Look professional! A neat and organized package following all the requirements of the contest rules is a must to remain in the running. Photos ©Lynda Richardson.





"Birds of a Feather" is a hugely popular category with a lot of entries whereas "Sporting Life" doesn't have near the same amount of entries.

Analyze What Wins

Look at past issues of the magazine contest you wish to enter. What seems to win the most? Does it seem like the judges prefer behavioral shots or more abstract images. Do they prefer cute or more documentary photographs? Is there even a pattern at all?

Look closer. Are all the winning photographs well composed with perfect exposures and gorgeous lighting? Are they unusual or hard to capture subjects requiring a lot of time to get the shot? Is it a common subject, which has been portrayed in a different way or at a different angle? Are the images really colorful or are they monochromatic? Usually, the harder to get and more unusual photographs will win. Avoid those images which can be shot by anyone, images which I've heard editors and judges say, "I've seen that shot a million times before..."

Increase your chances! Enter categories that have the least amount of competition, such as "A Sporting Life" in last years Virginia Wildlife magazine's Special Photographic Showcase issue.

Only Enter Your Very Best Photographs

Don't submit any image that you wouldn't consider really great! Don't try to submit the maximum number of images unless you have that many great pictures! A judge will be more impressed with five fabulous images then 20 mediocre ones. If you have any questions about which images to submit...ask your friends and family! Hopefully, they will give you an unbiased idea of what others might think of your work.

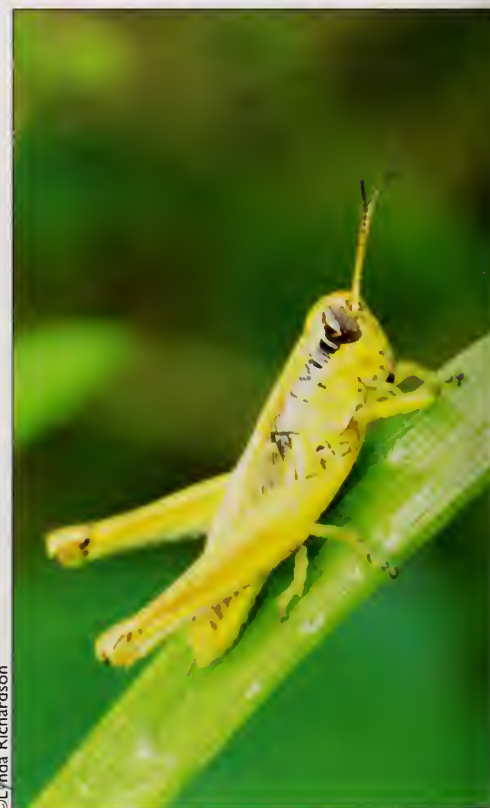
Be sure that your photographs are technically perfect! This mediocre, vertical photograph of a grasshopper is poorly exposed and soft. Compare it to the better-composed, horizontal image of a grasshopper, which is properly exposed and sharp. Which one do you think the judges will choose?

Are Photographs Technically Perfect

A photograph that is not properly exposed will automatically be thrown out so don't even bother submitting one. An image, which has beautiful lighting and an interesting composition, will attract the judges attention but you also need to make sure it's sharp, unless of course, it is supposed to be a softer photograph...on purpose! One thing to remember is that the judges are not only looking for images that are great in themselves, they are also looking for images that will reproduce well in their magazines!

Don't Let Bad Duplicate Slides Or Prints Ruin Your Chances

I have seen it time and time again. A potentially terrific photograph looses out because the print or duplicate slide that was submitted was of poor quality. I recommend only submitting originals, high quality reproduction duplicate slides, or beautiful prints. When a judge compares a du-



plicate slide with an original, usually the original is selected over the dupe because it is sharper. Badly made digital prints that have banding, pixilation, or dust specks will not be able to compete with well done photographic or high quality prints. And speaking of prints, a 4X6 print will have a very hard time competing with an 8X10 print so make your prints at least 5X7 or 8X10, if possible!

Submit Unique And Hard To Capture Images

The judges have been around. They have just about seen it all. So, if you send in photographs of common subjects that have been photographed in a common way, you will probably not win anything. You can still submit images of common subjects to a contest, but just portray them in a way you've never seen before! Study photographs on other photographer's Web sites, in books, and in magazines. Try to photograph your subjects in ways you have never seen before and enter those images.

Enter A Variety Of Images

If you have five great images of bears, don't submit them all, just pick two or three and save the rest for next year. Most judges will not award more than two placements to one person with images of the same species, unless of course, it is a species-specific contest.

Keep Your Fingers Crossed And Have A Sense of Humor

Lastly, you already know that the judges don't have a clue what a good picture is, unless you win. But if you don't win, just remember that that doesn't mean you submitted bad pictures. There are hundreds, even thousands, of great photographs that don't win in a competition. And what you don't see are the judges agonizing over the photographs, trying to make the best decision possible with their background of what makes a winning photograph. That said, when it comes to judging, there is a

Give Us Your Best Shot!

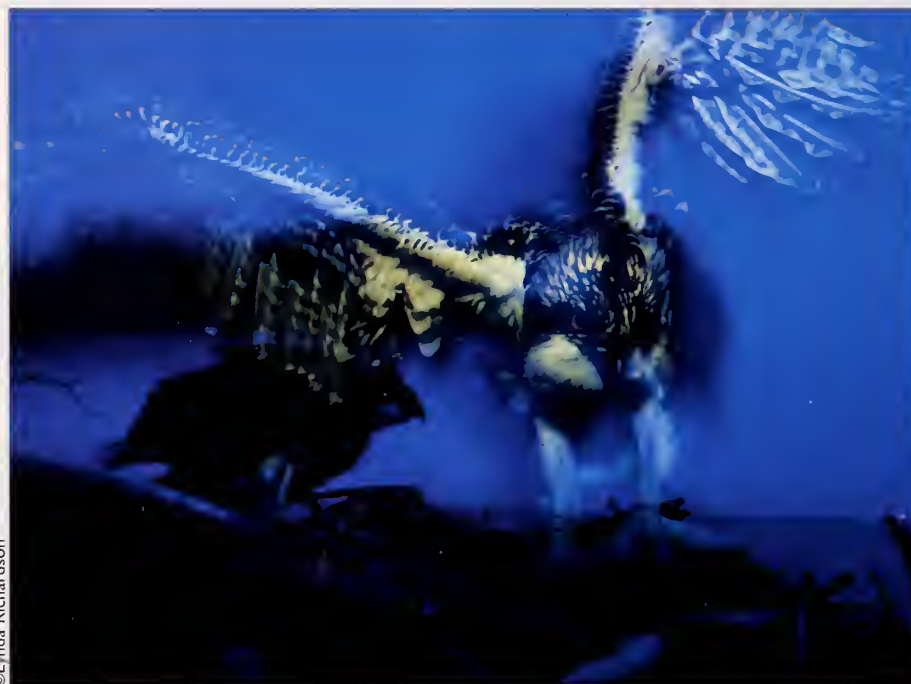
Each month *Virginia Wildlife* magazine would like to feature some of your images that have been taken in Virginia. Any subject matter related to Virginia's wildlife and the great outdoors will be accepted. Whether it's a whitewater kayaking adventure, an awesome fishing trip or a great photograph of the squirrel in your backyard. Please send your monthly "Best Shot" to; Virginia Wildlife Best Shot Contest, P.O. Box 11104, Richmond, VA 23230-1104. Please limit your submission to one 5X7 high quality print per month. Photographs will not be returned and may be used in a future issue of *Virginia Wildlife*. Eastman Kodak Company will graciously be sponsoring the monthly contest with a prize for the winner.



©Lynda Richardson



Submit something unique! Just about anyone can capture an osprey sitting on a perch. But have you ever seen a close, wide angle shot of osprey fledglings on a nest in the evening shot on Kodak T64 tungsten film?



lot of personal preference involved. If there is more than one judge, and normally there is, you also must realize that there are even more varying opinions about what is good and what is better. Some judges might look for more "artsy" images while another might prefer great behavioral images over technical perfection. It all comes down to this. Judging is just a particular opinion or group of opinions on a particular day. When several judges are involved it is a lesson in compromise. On many occasions, the judges will "politic" for their top choices with the other judges and there ends up being a lot of give and take.

The bottom line is this...if you go out into the great outdoors, experience the first bleat of a whitetail fawn, smell the fragrance of summer flowers, hear the plucky calls of a pond full of frogs, or just catch a glimpse of that black bear, you will be a winner! Whether you capture that image on film for others to see, admire and marvel at or you miss it totally I think you will agree that a photography contest is really just a great excuse to get out and take pictures in the places you love and then be able to share those amazing memories with others. □

Lynda Richardson is a renowned wildlife photographer and was included as one of the top female, outdoor photographers in Nature's Best magazine and continues to prove herself on assignments for Smithsonian, National Wildlife, The Nature Conservancy, Virginia Wildlife, and many other nationally as well as internationally acclaimed magazines.

Other Photography Contests

"Wildlife Photographer of the Year"
<http://internet.nhm.ac.uk/jdsml/wildwin/2004/index.html>

"Nature's Best Photography Awards"
<http://www.naturesbestmagazine.com/>

"National Wildlife Photography Competition" (full-time professionals can not enter this contest)
<http://www.nwf.org/nationalwildlife/photocontestrules.cfm>

"Virginia Wildlife Photography Contest"
http://www.dgif.virginia.gov/events/contests/photo_contest.html



Journal

2005 Outdoor Calendar of Events

July 8–10: *Virginia Outdoors Weekend*, Twin Lakes State Park, Green Bay. For more information contact Jimmy Mootz at 804-367-0656 or e-mail Jimmy.Mootz@dgif.virginia.gov.

August 26–28: *Mother-Daughter Outdoors*, Holiday Lake 4-H Educational Center, Appomattox. For more information contact Jimmy Mootz at 804-367-0656 or e-mail Jimmy.Mootz@dgif.virginia.gov.



Self Defense? Yeah, Right!

by Jennifer Worrell

When cornered by a game warden, some bear poachers like to claim they killed the animal in self-defense. Officer Mike Hull, of Nelson County, heard this excuse one day when a property owner called to report a bear had been shot on his land by trespassers. The two hunters stated that they had been hunting ginseng on the property when the bear attacked them. Since the property was posted and ginseng was out of season, the perpetrators were already in trouble. Hull, proficient in the use of visual tracking and sign to nab perpetrators, set out to investigate their story about the raging bear.

He followed the tracks and sign about a half mile up into the mountains. There he found the place where the men had cleaned the bear. He also found a freshly emptied quart beer bottle and added a litter charge to the

trespassing and illegal ginseng harvest summonses.

Hull found only human tracks on the ridge where the men shot the animal—he saw no sign at all of an angry bear. He found some blood where the bear had died and drag marks to the sight where the animal had been cleaned. The only bear tracks Hull found were between the place where the animal died and a tree stump it had obviously been tearing apart looking for grubs and small rodents. Hull found hair and blood at the stump from the initial shot, and he could determine the direction from where the shot came. The absence of bear tracks and the obvious disturbance around the stump later proved in court that the bear had NOT attacked the hunters; rather THEY had ambushed the bear while it was minding its own business eating grubs. Hull's sharp eyes disproved this overused excuse once again! □

FFV Honors Tom Gunter with Conservation Award

by Dan Genest

Tom Gunter, a district fisheries biologist with the Virginia Department of Game and Inland Fisheries, received the Fly Fishers of Virginia's Taylor Turner Conservation award for 2005 in ceremonies held in Richmond. Gunter was selected for the honor for his broad spectrum of work, including protecting and restoring Virginia's American shad and striped bass fisheries. He oversees an 11-county area that includes the native brook trout streams on the eastern slope of the Shenandoah National Park and the Mattaponi and Pamunkey rivers.



"In 26 years with the Department of Game and Inland Fisheries, Tom Gunter has played key roles in some of the state's most ambitious restoration efforts," said Larry Cortright, FFV's vice president for conservation. "He initiated the state's highly successful striped bass restoration effort in 1988 and is the state coordinator for the American shad restoration program."

A graduate of Ferrum College, Gunter started his career in the Department's cold and warm water hatchery program and gained extensive experience in the culture of cold, cool and warm water fish. Gunter is the fourth winner of the Taylor Turner Conservation award. Past honorees include Larry Mohn, also a district fisheries biologist with VDGIF; The Coastal Conservation Association for its work in restoring striped bass, and Richmond-based energy company Dominion for its efforts to reduce pollutants that contribute to acid rain.

Fly Fishers of Virginia is a Richmond-based club founded in 1983 to promote fly fishing in the state and to support conservation efforts that im-

prove fishing and fish habitat. The Taylor Turner Award is given each year in memory of Taylor Turner, one of the founders of FFV and an ardent believer in protecting our natural heritage. The award is presented yearly to an individual or organization that has demonstrated a commitment to fisheries conservation. □



The Hunt

The Virginia State Chapter of the National Wild Turkey Federation would like to invite young adults 17 years or younger to enter the 3rd Annual Youth Hunting Essay Contest. All that's needed to enter this year's contest is to submit your story of "The Hunt," and if possible include a photograph. Your story may be about one or more hunting adventures and may include people or groups that inspired you to participate in hunting activities. Your story does not have to include the harvesting of game.

Prizes will be awarded in two categories, 12 and under and 13 to 17

years old. Entries must be postmarked by May 31, 2005. Send entries to: William Hall, 461 East Meson St., Lexington, VA 24450 or call 540-463-2636.

Winner's of last year's Youth Hunting Essay Contest, in the 12 and under category, are Michael Wayne Alford of Buena Vista (his story is below) who took first place; and to Jacob Shearer of Blue Ridge for second. John Scott Moore of Lexington and Wayne Gordon of Rockbridge Baths tied for third place. In the 13 to 17 age category Louis Guy Norton, IV of Collinsville took first place; second place went to Tyler Huffman of Lovettsville and Joanna Elizabeth Norton of Collinsville took third place.

My First Turkey

by Michael Wayne Alford

It was a wet and cold Saturday morning. The first day of the official youth hunting season. I was excited about having a chance to hunt with my Dad and my grandfather "Pawpaw" Wayne, this year. We had all been talking about this day for a long time. The week before the hunt I had been really sick, so we weren't sure if I would be able to hunt on the opening day or not. We were all supposed to get up early on Saturday morning. My Pawpaw tried to wake me up at 4:00 a.m., but I was so tired that I decided to stay in bed for a little while longer.

Later, when I finally awoke, I decided I still wanted to go hunting. So the three of us went to my other Pawpaw's farm. It was a long walk and I was still wasn't feeling very well so we took our time. My Pawpaw, told me to follow him and to pick a spot where I wanted to hunt. We walked across a field and set up behind an old log, beside a really big tree. Then we set out a turkey decoy. Finally, Pawpaw gave me my turkey box call and he told me this was going to be my day, and that I had to call up a turkey on my own.

After only a few minutes Pawpaw got really excited. He told me to be very still and quiet. He had spotted a huge gobbler and it was headed my way. Pawpaw kept telling me to be still, even though I wasn't moving. I think he was more nervous than I was.

The wind was blowing a little that morning and every few minutes the breeze would cause the decoy to move a little bit. Oh, that big gobbler loved that! My Pawpaw and I picked up my 20-gauge Mossberg shotgun, which I had received as a Christmas present, and steadied it on the log. Then it happened. That big, old turkey looked right at us and I pulled the trigger as hard as I could. The shot filled my ears and the gun kicked me back, but I knew what had just happened.

Pawpaw jumped up and told me to come on. He couldn't understand why I wasn't running to the gobbler. I wanted to, but I told Pawpaw later that my foot had fallen asleep and I couldn't move. I got up as quickly as I could and climbed over the log. Sure enough, I had shot and killed my first gobbler.

I felt my chest fill up with pride as Pawpaw sat down next to that big old gobbler and me. Pawpaw was shaking and we really didn't know what to say for a while. We just sat there together and then hugged. Then after awhile, my Pawpaw said he was so proud of what "we" had done and me. I wasn't sure what he had meant, since there were only the two of us hunting. Pawpaw grinned and then he pointed upward. I knew what he meant then.

My Pawpaw had to carry that big gobbler back to the truck for me. As we walked off the hill I looked up at my Pawpaw, grinned real big, and said, "Well Pawpaw, I'm a hunter now!" He looked at me and said "You sure are...you sure are."

I checked my turkey in later that day. It had 1 3/8-inch spurs, an 8-inch beard and weighed in at 25 lbs. I love turkey hunting! □

RECIPES

by Joan Cone

Striped Bass Are Versatile

It's a pleasure to have friends like Larry Johnson who enjoys sharing his angling success. He stopped by and gave us a 26-inch fillet from a 35 pound striped bass. After skinning, the thick fillet weighed four pounds. I divided it into four packages. This provided thick fillets for the following recipes.

Menu

Striped Bass Chowder
Batter Fried Striped Bass
Fresh Mozzarella & Tomato Salad
Zesty Butter Sticks
Fresh Strawberry Pie

Striped Bass Chowder

Virginia Wildlife reader, Carol Kessler, sent me this easy, delicious recipe.

1 pound thick striped bass fillet, cut into 1-inch cubes
4 medium white potatoes, peeled and cubed
1 medium yellow onion, finely chopped
2 tablespoons butter
2½ to 3 cups milk, not below 4 %
Salt and freshly ground pepper to taste

Place cubed potatoes in a large saucepan, cover with water and simmer 10 to 12 minutes until fork can pierce. Drain and set aside. In a deep, Dutch oven type pot, sauté onion in butter until translucent. Add fish cubes to pot with onions and cover with water. Boil gently until fish turns white. Do not drain. Add potatoes and milk; salt and pepper to taste. Heat thoroughly, cool and refrigerate overnight. Reheat the next day. If you make this chowder in the morning, and refrigerate after cooling, you could reheat it for dinner that evening. Serves 4 to 6.

Batter-Fried Striped Bass

Here is another way to prepare thick striped bass fillets.

Thick striped bass fillet, cut into ½-inch thick pieces
2 eggs
½ teaspoon sugar
4 heaping tablespoons flour
4 to 8 dashes Worcestershire sauce
Milk
Salt and pepper to taste
Vegetable oil

Beat together eggs, sugar, flour and Worcestershire sauce. Add enough milk to provide a heavy cream consistency. Salt and lightly pepper striper pieces and dip them in the batter. Deep fry quickly in vegetable oil at 375° F. to 400° F. One pound of fish will serve 3.

Fresh Mozzarella & Tomato Salad

¾ cup raisins
4 tablespoons olive oil
3 tablespoons balsamic vinegar
½ teaspoon each of dried oregano, thyme and rosemary
Salt to taste
1 pound fresh mozzarella, cut in ¼-inch slices
3 medium tomatoes, cut in ¼-inch slices
Fresh ground black pepper

Combine raisins, olive oil, balsamic vinegar, herbs and salt in microwave-safe bowl. Microwave on HIGH power 30 to 45 seconds until warm; stir. Refrigerate 30 minutes or until cool. (Raisins can be prepared up to 24 hours ahead and refrigerated.) Arrange alternate overlapping slices of mozzarella and tomato on a large platter. Spoon raisin mixture evenly over salad. Season with pepper. Makes 6 to 8 servings.

Zesty Butter Sticks

½ loaf French or Italian bread (approx. 10" x 4")
½ cup butter, softened
½ teaspoon chervil
½ teaspoon basil leaves
¼ teaspoon garlic powder
¼ teaspoon onion powder

Cut bread in half lengthwise. Then cut each piece lengthwise to make 3 wedges (total of 6 wedges). In small bowl combine remaining ingredients; blend well. Spread butter on cut surfaces of bread wedges. Bake on ungreased 15" x 10" baking sheet near center of a preheated 425° F. oven for 7 to 9 minutes or until golden brown. Serve warm.

Fresh Strawberry Pie

1 baked 9-inch pie shell
1 quart fresh strawberries
1 cup sugar
3 tablespoons cornstarch
2 tablespoons lemon juice
Red food coloring (optional)
½ pint whipping cream (optional)

Wash berries and hull. Put ½ of berries (1 pint) in saucepan and crush. Mix sugar and cornstarch and add to crushed berries along with lemon juice. Cook on medium heat until mixture thickens. Cool. Cut remaining berries into halves and mix with the cooked mixture. Add a few drops of food coloring to the cooked mixture before adding the uncooked berries. Pour mixture into baked pie shell. Chill before serving. Serve topped with whipped cream. Makes 8 servings. □

On The Water

by Jim Crosby



Does Your Boat Have Fenders?

No fenders on your boat! If you have something larger than a canoe, jon boat or raft, you should put some on before you break or damage something. While I can't imagine operating a boat without fenders, I am dismayed to find not many boaters have them onboard. You see them at the fuel dock using a life jacket or seat cushion to buffer their hulls from the dock. This is a very bad practice because they don't do a good job as a fender and after being put to that use, they don't do a good job as a flotation device either.

Beyond that, the scariest thing I have seen is people using their feet and legs, or hands and arms, to fend off from a dock. Aside from striking a match to check the gas tank's fuel level, putting body parts between boats and docks is the next most dangerous.

Skippers should be very alert to the natural human instinct passengers have to try to protect the boat. In anticipation of docking or rafting up, a skipper should ask that fenders be put overboard to absorb the shock of the landing. This move will preempt some eager passenger from volunteering a body part for the job.

Once you decide that fenders should become a part of your boat's equipment, the question of what kind and how many has to be answered. The inflated, tubular type seems to be the most popular. The size has to relate to the size of your vessel, the curvature of your hull and the dockage of primary use. One tie-up will tell the story as to whether or not your fender is going to fill the gap

between the dock and the point of contact with your hull. The round rubber ball type offers greater thickness to fill that gap but they are awkward to store.

Checking your tie-up when the boat is motionless in calm water is not the best. When the boat starts bobbing around in reaction to a wake is usually when the fenders move out of position and just flop above or below the point of contact. This can lead to great disappointment upon your return to find scrapes and gashes in your hull. So as a hint, you should put your boat in motion and observe for a few minutes to make certain the fender is going to stay put and do its job. Out of habit, I always take a pause and check my tie-up before walking away. That's the time to find a tie-up knot that isn't just right or a fender that's going to move out of position. Oh, don't forget to take into consideration any tidal changes that might occur before you return. It's embarrassing to find your boat hanging from the dock because the water level dropped—or worse, cleats wrenched from the hull, lines parted or dock decking poking into your hull.

After you decide that fenders are a good idea, you then have to tackle the question of how to fasten them. Your marine dealer has a number of commercial answers ranging from special attachment points that get mounted on your gunwale to rail and/or cleat tie-ups. This presents an opportunity to become real creative and come up with your own special way of attachment. Because of the

way I use my boat, I have to attach a fender in a different place almost every time so that precludes any permanent attachment points. I usually rely on a cleat or rail attachment, which gives me complete flexibility. On the cleats, of which I have plenty all around my boat, I use the figure eight cleat hitch. When I secure to a rail, I use the clove hitch backed up by one or two half hitches. The stanchions that support your rails are an excellent point of attachment when they are located in the right spot.

For maximum flexibility, your fenders should have between three and four feet of line attached in some permanent way such as an eye splice or a very secure knot. While it is poor seamanship to run with your fenders over board, sometimes we forget to pull them back onboard when getting underway. This leads to the comical sight of seeing a boat bobbing along with the fenders flopping like broken wings surely to be lost if not securely fastened.

Let me share a caution about cleats. Some boat builders consider cleats a stylistic ornament that offers more visual impact than security—some are recessed and hard to secure a line to, they are undersized for the stresses to be placed on them and often they are made of inferior materials that can't handle any stress. Beyond that, they are often screwed to the hull instead of being through bolted with a backing plate to spread the load. I have seen a lot of boats adrift because the cleats were pulled from the hull while tied-up to a dock in a wind. □

story and illustration
by Spike Knuth

Hooded Warbler *Wilsonia citrina*

I saw my first one at Whitnall Park in Milwaukee about 60 years ago. I found it right where all the bird books said they'd be found; along a small, heavily shaded creek. It was foraging through low growing shrubs flitting about lightly, almost as if dancing. Sometimes it would fly out over the creek and snatch a flying insect, or hover over a large leafed sapling to pick off a small caterpillar or beetle.

The hooded warbler is a common breeding warbler of mainly the southern and eastern United States, with some nesting up into Wisconsin, around the Great Lakes, and southern Ontario. A little over 5 inches long, the males have olive-green upperparts, with bright yellow forehead and cheeks, surrounded by a black hood over the top of the head, back of the neck, on the chin, and upper part of the breast. The tail is rounded with noticeable white outer tail feathers. Females are similar but generally duller and usually lacking the rich black hood. Occasionally a few are so marked as to be difficult to tell apart from the males. Hoodeds have relatively large eyes which stand out against the bright yellow face.

Like other warblers, the hooded is very active as it feeds. It flicks and fans its tail open and shut, revealing the white tail feathers. It has a relatively large bill, a bit flattened at the base, with hair-like rectal bristles around it, much like a flycatcher. Much of its foraging is done like a flycatcher as it feeds on small insects, wasps, spiders, beetles, moths, flies, small caterpillars, lice and aphids.

Hooded warblers are birds of

dense under story. Stream bottoms, swamps, and wet hollows with heavy undergrowths of laurel, rhododendron, blackberry and grape vines beneath combinations of ash, oak, beech, cherry, cedar and hemlock are favored in the mountains and northern breeding areas. In the south they gravitate to swamplands of tupelo, cypress, palmetto and cane. During nesting the males will forage in the upper canopy and sing from high perches while the female forages near the ground.

The song of the hooded warbler is loud and clear and sounds somewhat like, "weeta, weeta, wee-TEE-cha," rising in pitch with emphasis on the ending. Here in Virginia their call can be heard in late-April as they arrive from the south. The males arrive first, followed in a week or so by the females once territories have been established.

The female builds her nest low in shrubs, especially rhododendron and laurel thickets in the mountains; or in cypress or cedar swamps in the lowlands. It's built in the fork of a branch and is made up of leaves and plant fibers, held together with spider silk and lined with fine grasses, rootlets, and animal hair. It often

appears as a ball of leaves stuck in the branch.

About three to five eggs are laid; basically white with reddish-brown and purple markings. Incubation takes 12 days and the young fledge in another 10 or 12 days. The male will complete feeding chores of the first brood while the female begins a second brood.

The fall migration may begin as early as late July. Migration peaks in mid to late September with stragglers into early October. They winter in eastern and southern Mexico, Panama, Cuba, Jamaica and the Bahamas, with some staying in the Gulf States. □



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